

Appn. No. 10/718,400  
Attny. Dkt. No. 14846-36

**Amendments to the Specification:**

Please replace paragraph [0005] of the specification as published (*see* US 2005/0071807 A1) with the following paragraph.

[0005] The present invention provides a novel way to forecast the number of software defects for an upcoming software release. According to the methods and systems of the present invention, the relative size of an upcoming software release with respect to a baseline software release is determined, and the number of software defects for the upcoming software release is forecast based on the relative size of the upcoming software release and the number of observed software defects for the baseline software release. The relative size of the upcoming software release can be obtained by determining the number of new test requirements for the upcoming software release, determining the number of test requirements for the baseline software release, and dividing the number of new test requirements for the upcoming software release by the number of test requirements for the baseline software release. The forecasted number of software defects can be then be calculated by multiplying the number of observed software defects for the baseline software release by the relative size of the upcoming software release.

Please replace paragraph [0027] of the specification as published with the following paragraph.

[0027]  $TR_{n-y}$  is the number of test requirements for release  $n-y$ , where

$$y = 1, \dots, m - 1, \text{ and } y < n.$$

Please replace paragraph [0042] of the specification as published with the following paragraph.

[0042] As discussed above, the New Functionality Factor ( $NFF_n$ ) may be determined by dividing the number of new test requirements for an upcoming software release by the number of test

Appl. No. 10/718,400  
Attr. Dckt. No. 14846-36

requirements for a "benchmark" software release. However, this assumes that all defects are discovered only in the new functionality. We can overcome this assumption by taking into account the factor of actual regression defects (R) (percentage of actual regression defects divided by 100) in the release that we are using as the benchmark. The following formula may be used in lieu of Formula 2 to calculate the estimated number of defects in an upcoming software release, taking into consideration regression defects.

$$D_n = D_{n-y} * (NFF_n + R_{n-y}) \quad (4)$$